

PCT

FIRST NOTICE INFORMING THE APPLICANT OF
THE COMMUNICATION OF THE INTERNATIONAL
APPLICATION (TO DESIGNATED OFFICES WHICH
DO NOT APPLY THE 30 MONTH TIME LIMIT
UNDER ARTICLE 22(1))

To:

MATSUNAGA, Takayoshi
Takaai Bldg.
15-2, Nihonbashi 3-chome
Chuo-ku, Tokyo 1030027
JAPON

(PCT Rule 47.1(c))

Date of mailing (day/month/year) 29 September 2005 (29.09.2005)		IMPORTANT NOTICE
Applicant's or agent's file reference PC3947		
International application No. PCT/JP2005/003157	International filing date (day/month/year) 25 February 2005 (25.02.2005)	Priority date (day/month/year) 27 February 2004 (27.02.2004)
Applicant JAPAN SCIENCE AND TECHNOLOGY AGENCY et al		

- ATTENTION:** For any designated Office(s), for which the time limit under Article 22(1), as in force from 1 April 2002 (30 months from the priority date), **does apply**, please see Form PCT/IB/308(Second and Supplementary Notice) (to be issued promptly after the expiration of 28 months from the priority date).
- Notice is hereby given that the following designated Office(s), for which the time limit under Article 22(1), as in force from 1 April 2002, **does not apply**, has/have requested that the communication of the international application, as provided for in Article 20, be effected under Rule 93bis.1. The International Bureau has effected that communication on the date indicated below:
09 September 2005 (09.09.2005)

CH

In accordance with Rule 47.1(c-bis)(i), those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

- The following designated Offices, for which the time limit under Article 22(1), as in force from 1 April 2002, **does not apply**, have not requested, as at the time of mailing of the present notice, that the communication of the international application be effected under Rule 93bis.1:

LU, SE, TZ, UG, ZM

In accordance with Rule 47.1(c-bis)(ii), those Offices accept the present notice as conclusive evidence that the Contracting State for which that Office acts as a designated Office does not require the furnishing, under Article 22, by the applicant of a copy of the international application.

4. TIME LIMITS for entry into the national phase

For the designated Office(s) listed above, and unless a demand for international preliminary examination has been filed before the expiration of 19 months from the priority date (see Article 39(1)), the applicable time limit for entering the national phase will, **subject to what is said in the following paragraph, be 20 MONTHS** from the priority date.

In practice, time limits other than the 20-month time limit will continue to apply, for various periods of time, in respect of certain of the designated Offices listed above. For regular updates on the applicable time limits (20 or 21 months, or other time limit), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO 34, chemin des Colonnettes 1211 Geneva 20, Switzerland	Authorized officer Masashi Honda
Facsimile No. +41 22 740 14 35	Facsimile No. +41 22 338 70 10

From the INTERNATIONAL BUREAU

(1)

PCT

SECOND AND SUPPLEMENTARY NOTICE
INFORMING THE APPLICANT OF THE
COMMUNICATION OF THE INTERNATIONAL
APPLICATION (TO DESIGNATED OFFICES
WHICH APPLY THE 30 MONTH TIME
LIMIT UNDER ARTICLE 22(1))

(PCT Rule 47.1(c))

To:

MATSUNAGA, Takayoshi
Kagoshima Bldg.
15-2, Nihonbashi 3-chome
Chuo-ku, Tokyo 103-0027
JAPAN

Date of mailing (day/month/year)
29 June 2006 (29.06.2006)

Applicant's or agent's file reference
PC3947

IMPORTANT NOTICE

International application No.
PCT/JP2005/003157

International filing date (day/month/year)
25 February 2005 (25.02.2005)

Priority date (day/month/year)
27 February 2004 (27.02.2004)

Applicant

JAPAN SCIENCE AND TECHNOLOGY AGENCY et al

- ATTENTION:** For any designated Office(s), for which the time limit under Article 22(1), as in force from 1 April 2002 (30 months from the priority date), **does not apply**, please see Form PCT/IB/308(First Notice) issued previously.
- Notice is hereby given that the following designated Office(s), for which the time limit under Article 22(1), as in force from 1 April 2002, **does apply**, has/have requested that the communication of the international application, as provided for in Article 20, be effected under Rule 93bis.1. The International Bureau has effected that communication on the date indicated below:
09 September 2005 (09.09.2005)

AU, AZ, BY, CN, CO, DZ, EP, HU, KG, KP, KR, MD, MK, MZ, NA, PG, RU, SY, TM, US

In accordance with Rule 47.1(c-bis)(i), those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

- The following designated Offices, for which the time limit under Article 22(1), as in force from 1 April 2002, **does apply**, have not requested, as at the time of mailing of the present notice, that the communication of the international application be effected under Rule 93bis.1:

AE, AG, AL, AM, AP, AT, BA, BB, BG, BR, BW, BZ, CA, CR, CU, CZ, DE, DK, DM, EA, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KZ, LC, LK, LR, LS, LT, LV, MA, MG, MN, MW, MX, NI, NO, NZ, OA, OM, PH, PL, PT, RO, SC, SD, SG, SK, SL, SM, TJ, TN, TR, TT, UA, UZ, VC, VN, YU, ZA, ZW

In accordance with Rule 47.1(c-bis)(ii), those Offices accept the present notice as conclusive evidence that the Contracting State for which that Office acts as a designated Office does not require the furnishing, under Article 22, by the applicant of a copy of the international application.

4. TIME LIMITS for entry into the national phase

For the designated or elected Office(s) listed above, the applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 30 MONTHS from the priority date.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain of the designated or elected Office(s) listed above. For regular updates on the applicable time limits (30 or 31 months, or other time limit), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

It is the applicant's sole responsibility to monitor all these time limits.

International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Masashi Honda

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

MATSUNAGA, Takayoshi
Kagoshima Bldg.
15-2, Nihonbashi 3-chome
Chuo-ku, Tokyo 103-0027
Japan

Date of mailing (day/month/year)

04 January 2006 (04.01.2006)

Applicant's or agent's file reference

PC3947

IMPORTANT NOTIFICATION

International application No.

PCT/JP2005/003157

International filing date (day/month/year)

25 February 2005 (25.02.2005)

1. The following indications appeared on record concerning:

☐

the applicant

☐

the inventor

☒

the agent

☐

the common representative

Name and Address

(1) MATSUNAGA, Takayoshi
(2) IIZUKA, Kyoko
Takaa! Bldg.
15-2, Nihonbashi 3-chome
Chuo-ku, Tokyo 1030027
Japan

State of Nationality

State of Residence

Telephone No.

03-5205-2517

Facsimile No.

03-5205-2519

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐

the person

☐

the name

☒

the address

☐

the nationality

☐

the residence

Name and Address

(1) MATSUNAGA, Takayoshi
(2) IIZUKA, Kyoko
Kagoshima Bldg.
15-2, Nihonbashi 3-chome
Chuo-ku, Tokyo 103-0027
Japan

State of Nationality

State of Residence

Telephone No.

03-5205-2517

Facsimile No.

03-5205-2519

Teleprinter No.

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

☒

the receiving Office

☐

the International Searching Authority

☐

the International Preliminary Examining Authority

☒

the designated Offices concerned

☐

the elected Offices concerned

☐

other:

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Denis RAMEN (Fax 338 7010)

Facsimile No. (41-22) 338.70.10

Telephone No. (41-22) 338 9304

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
APPLICATION AS PUBLISHED OR REPUBLISHED

To:

MATSUNAGA, Takayoshi
Takaai Bldg.
15-2, Nihonbashi 3-chome
Chuo-ku, Tokyo 1030027
JAPON

Date of mailing (*day/month/year*)

09 September 2005 (09.09.2005)

Applicant's or agent's file reference

PC3947

IMPORTANT NOTICE

International application No.

PCT/JP2005/003157

International filing date (*day/month/year*)

25 February 2005 (25.02.2005)

Priority date (*day/month/year*)

27 February 2004 (27.02.2004)

Applicant

JAPAN SCIENCE AND TECHNOLOGY AGENCY et al

The International Bureau transmits herewith the following documents:



copy of the international application as published by the International Bureau on 09 September 2005 (09.09.2005) under
No. WO 2005/083417



copy of international application as republished by the International Bureau on under
No. WO

For an explanation as to the reason for this republication of the international application, reference is made to INID codes (15), (48)
or (88) (*as the case may be*) on the front page of the attached document.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Masashi Honda

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/003157

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl.⁷ G01N27/62, 27/64, H01J49/04, 49/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.⁷ G01N27/62, 27/64, H01J49/04, 49/10

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2005
Kokai Jitsuyo Shinan Koho	1971-2005	Toroku Jitsuyo Shinan Koho	1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PATENT FILE (PATOLIS), JSTPlus (JOIS)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X <u>Y</u>	Ho Ming Pang, et al., "Supercritical fluid jet expansions of polar aromatic carboxylic acids using simple derivatization with detection by resonant two-photon ionization", Spectrochimica Acta, 21 September, 1987 (21.09.87), Vol.43, Nos.4/5, pages 671 to 677	1,2,5 <u>3,4,6</u>
Y	JP 2003-329556 A (Communications Research Laboratory), 19 November, 2003 (19.11.03), Par. No. [0022]; Fig. 1 & US 2003/0168592 A1	3,6

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
19 May, 2005 (19.05.05)Date of mailing of the international search report
07 June, 2005 (07.06.05)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/003157

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 5-333016 A (Shimadzu Corp.), 17 December, 1993 (17.12.93), Par. Nos. [0002] to [0003] (Family: none)	4

特許協力条約に基づく国際出願願書

紙面による写し (注意: 電子データが原本となります)

0	受理官庁記入欄	
0-1	国際出願番号	
0-2	国際出願日	
0-3	(受付印)	
0-4	様式-PCT/RO/101 この特許協力条約に基づく国際出願願書 は、 0-4-1 右記によって作成された。	JPO-PAS 0322
0-5	申立て 出願人は、この国際出願が特許協力条約 に従って処理されることを請求する。	
0-6	出願人によって指定された受理官庁	日本国特許庁 (RO/JP)
0-7	出願人又は代理人の書類記号	PC3947
I	発明の名称	超臨界流体ジェット法及び超臨界流体ジェット質量分 析方法と装置
II	出願人	
II-1	この欄に記載した者は	出願人である (applicant only)
II-2	右の指定国についての出願人である。	米国を除く全ての指定国 (all designated States except US)
II-4ja	名称	独立行政法人科学技術振興機構
II-4en	Name:	Japan Science and Technology Agency
II-5ja	あて名	3320012 日本国 埼玉県川口市本町四丁目1番8号
II-5en	Address:	4-1-8, Honcho, Kawaguchi-shi, Saitama 3320012 Japan
II-6	国籍(国名)	日本国 JP
II-7	住所(国名)	日本国 JP
II-11	出願人登録番号	503360115

特許協力条約に基づく国際出願願書

紙面による写し(注意:電子データが原本となります)

III-1	その他の出願人又は発明者	出願人及び発明者である (applicant and inventor) 米国のみ (US only) 石内 俊一 ISHIUCHI, Shun-ichi 2268503 日本国 神奈川県横浜市緑区長津田町4 2 5 9 東京工業大学 資源化学研究所分光化学部門内 c/o Spectroscopy Division of Chemical Resources Laboratory Chemical, Tokyo Institute of Technology, 4259 Nagatsuta, Midori-ku, Kanagawa 2268503 Japan 日本国 JP 日本国 JP
III-1-1	この欄に記載した者は	
III-1-2	右の指定国についての出願人である。	
III-1-4a	氏名(姓名)	
III-1-4en	Name (LAST, First):	
III-1-5a	あて名	
III-1-5en	Address:	
III-1-6	国籍(国名)	
III-1-7	住所(国名)	
IV-1	代理人又は共通の代表者、通知のあて名 下記の場合は国際機関において右記のごとく 出願人のために行動する。	代理人 (agent)
IV-1-1a	氏名(姓名)	松永 孝義
IV-1-1en	Name (LAST, First):	MATSUNAGA, Takayoshi
IV-1-2a	あて名	1030027 日本国 東京都中央区日本橋3丁目15番2号 高愛ビル
IV-1-2en	Address:	Takaai Bldg., 15-2, Nihonbashi 3-chome, Chuo-ku, Tokyo 1030027 Japan
IV-1-3	電話番号	03-5205-2517
IV-1-4	ファクシミリ番号	03-5205-2519
IV-1-6	代理人登録番号	100096541
IV-2	その他の代理人	筆頭代理人と同じあて名を有する代理人 (additional agent(s) with the same address as first named agent)
IV-2-1a	氏名	飯塚 向日子(100133318)
IV-2-1en	Name(s)	IIZUKA, Kyoko(100133318)
V	国の指定	
V-1	この願書を用いてされた国際出願は、規則 4.9(a)に基づき、国際出願の時点で拘束さ れる全てのPCT締約国を指定し、取得しよう とする権限の保護を求め、及び該当する 場合には域と国内特許の両方を求める 国際出願となる。	
VI-1	先の国内出願に基づく優先権主張	
VI-1-1	出願日	2004年 02月 27日 (27.02.2004)
VI-1-2	出願番号	2004-053391
VI-1-3	国名	日本国 JP

特許協力条約に基づく国際出願願書

紙面による写し(注意:電子データが原本となります)

V-2	優先権証明書送付の請求 上記の先の出願のうち、右記の番号のものについては、出願書類の略証原本を作成し国際事務局へ送付することを、受審官庁に対して請求している。	VI-1	
VII-1	特定された国際調査機関(ISA)	日本国特許庁 (ISA/JP)	
VIII	申立て	申立て数	
VIII-1	発明者の特定に関する申立て		
VIII-2	出願し及び特許を与えられる国際出願日における出願人の資格に関する申立て		
VIII-3	先の出願の優先権を主張する国際出願日における出願人の資格に関する申立て		
VIII-4	発明者である旨の申立て(米国を指定国とする場合)		
VIII-5	不利にならない開示又は新規性喪失の例外に関する申立て		
IX	照合欄	用紙の枚数	添付された電子データ
IX-1	願書(申立てを含む)	4	✓
IX-2	明細書	16	✓
IX-3	請求の範囲	2	✓
IX-4	要約	1	✓
IX-5	図面	5	✓
IX-7	合計	28	
	添付書類	添付	添付された電子データ
IX-8	手数料計算用紙	-	✓
IX-17	PCT-SAFE 電子出願	-	-
IX-19	要約書とともに提示する図の番号	1	
IX-20	国際出願の使用言語名	日本語	
X-1	出願人、代理人又は代表者の記名押印	/100096541/	
X-1-1	氏名(姓名)	松永 孝義	
X-1-2	署名者の氏名		
X-1-3	権限		

受理官庁記入欄

10-1	国際出願として提出された書類の実際の受理の日	
10-2	図面	
10-2-1	受理された	
10-2-2	不足図面がある	
10-3	国際出願として提出された書類を補完する書類又は図面であってその後期間内に提出されたものの実際の受理の日(訂正日)	
10-4	特許協力条約第11条(2)に基づく必要な補完の期間内の受理の日	
10-5	出願人により特定された国際調査機関	ISA/JP
10-6	調査手数料未払いにつき、国際調査機関に調査用写しを送付していない	

特許協力条約に基づく国際出願願書

紙面による手し(注意:電子データが原本となります)

国際事務局記入欄

11-1	記録原本の受理の日	
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PCT

NOTIFICATION OF RECEIPT OF
RECORD COPY

(PCT Rule 24.2(a))

From the INTERNATIONAL BUREAU

To:

MATSUNAGA, Takayoshi
Takaai Bldg.
15-2, Nihonbashi 3-chome
Chuo-ku, Tokyo 1030027
Japan

Date of mailing (day/month/year) 29 March 2005 (29.03.2005)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference PC3947	International application No. PCT/JP2005/003157

The applicant is hereby notified that the International Bureau has received the record copy of the international application as detailed below.

Name(s) of the applicant(s) and State(s) for which they are applicants:

JAPAN SCIENCE AND TECHNOLOGY AG (for all designated States except US)
ISHIUCHI, Shun-ichi (for US)

International filing date : 25 February 2005 (25.02.2005)

Priority date(s) claimed : 27 February 2004 (27.02.2004)

Date of receipt of the record copy
by the International Bureau : 10 March 2005 (10.03.2005)

List of designated Offices :

AP : BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW

EA : AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP : AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR

OA : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

National : AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 338.70.10

Authorized officer:

Hatsune OKUBO-WEND (Fax 338 7010)

Telephone No. (41-22) 338 9999

NOTIFICATION OF RECEIPT OF RECORD COPY

Date of mailing (day/month/year) 29 March 2005 (29.03.2005)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference PC3947	International application No. PCT/JP2005/003157

ATTENTION

The applicant should carefully check the data appearing in this Notification. In case of any discrepancy between these data and the indications in the international application, the applicant should immediately inform the International Bureau.

In addition, the applicant's attention is drawn to the information contained in the Annex, relating to:

- ☒ time limits for entry into the national phase - see **updated important information** (as of April 2002)
- ☒ requirements regarding **priority documents** (if applicable)

A copy of this Notification is being sent to the receiving Office and to the International Searching Authority.

INFORMATION ON TIME LIMITS FOR ENTERING THE NATIONAL PHASE

The applicant is reminded that the "national phase" must be entered before each of the designated Offices indicated on the cover sheet of this Notification by paying national fees and furnishing translations, as prescribed by Articles 22 and 39 and the applicable national laws. In addition, the applicant may also have to comply with other special requirements applicable in certain Offices. It is the applicant's responsibility to ensure the necessary steps to enter the national phase are taken in a timely fashion. Most Offices do not issue reminders to applicants in connection with the entry into the national phase.

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be **30 MONTHS** from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of 19 months from the priority date (see Article 39(1)), but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see PCT Gazette No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the PCT Newsletter, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the PCT Gazette ("Section IV" part published on a weekly basis), to the PCT Newsletter (on a monthly basis) and to the relevant National Chapters in Volume II of the PCT Applicant's Guide (the paper version of which is updated usually twice a year and the Internet version of which is updated usually on a weekly basis). Finally, a cumulative table of all applicable time limits for entering the national phase is available from WIPO's Internet site, via links from various pages the site including those of the Gazette, Newsletter and Guide, at <http://www.wipo.int/pct/en/index.html>.

Information about the requirements for filing a demand for international preliminary examination is set out in the PCT Applicant's Guide, Volume I/A, Chapter IX. Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

REQUIREMENTS REGARDING PRIORITY DOCUMENTS

For applicants who have not yet complied with the requirements regarding priority documents, the following is recalled.

Where the priority of an earlier national, regional or international application is claimed, the applicant must submit a copy of the said earlier application, certified by the authority with which it was filed ("the priority document") to the receiving Office (which will transmit it to the International Bureau) or directly to the International Bureau, before the expiration of 16 months from the priority date, provided that any such priority document may still be submitted to the International Bureau before that date of international publication of the international application, in which case that document will be considered to have been received by the International Bureau on the last day of the 16-month time limit (Rule 17.1(a)).

Where the priority document is issued by the receiving Office, the applicant may, instead of submitting the priority document, request the receiving Office to prepare and transmit the priority document to the International Bureau. Such request must be made before the expiration of the 16-month time limit and may be subject to the receiving Office to the payment of a fee (Rule 17.1(b)).

If the priority document concerned is not submitted to the International Bureau or if the request to the receiving Office to prepare and transmit the priority document has not been made (and the corresponding fee, if any, paid) within the applicable time limit indicated under the preceding paragraphs, any designated State may disregard the priority claim, provided that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within the time limit which is reasonable under the circumstances (Rule 17.1(c)).

Where several priorities are claimed, the priority date to be considered for the purposes of computing the 16-month time limit (and all other PCT time limits) is the filing date of the earliest application whose priority is claimed (Article 2(xii)(b)).

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

To:

MATSUNAGA, Takayoshi
Takaai Bldg.
15-2, Nihonbashi 3-chome
Chuo-ku, Tokyo 1030027
JAPON

Date of mailing (<i>day/month/year</i>) 03 June 2005 (03.06.2005)	
Applicant's or agent's file reference PC3947	IMPORTANT NOTIFICATION
International application No. PCT/JP05/003157	International filing date (<i>day/month/year</i>) 25 February 2005 (25.02.2005)
International publication date (<i>day/month/year</i>)	Priority date (<i>day/month/year</i>) 27 February 2004 (27.02.2004)
Applicant JAPAN SCIENCE AND TECHNOLOGY AGENCY et al	

- By means of this Form, which replaces any previously issued notification concerning submission or transmittal of priority documents, the applicant is hereby notified of the date of receipt by the International Bureau of the priority document(s) relating to all earlier application(s) whose priority is claimed. Unless otherwise indicated by the letters "NR", in the right-hand column or by an asterisk appearing next to a date of receipt, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- (If applicable)* The letters "NR" appearing in the right-hand column denote a priority document which, on the date of mailing of this Form, had not yet been received by the International Bureau under Rule 17.1(a) or (b). Where, under Rule 17.1(a), the priority document must be submitted by the applicant to the receiving Office or the International Bureau, but the applicant fails to submit the priority document within the applicable time limit under that Rule, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- (If applicable)* An asterisk (*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b) (the priority document was received after the time limit prescribed in Rule 17.1(a) or the request to prepare and transmit the priority document was submitted to the receiving Office after the applicable time limit under Rule 17.1(b)). Even though the priority document was not furnished in compliance with Rule 17.1(a) or (b), the International Bureau will nevertheless transmit a copy of the document to the designated Offices, for their consideration. In case such a copy is not accepted by the designated Office as the priority document, Rule 17.1(c) provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
27 February 2004 (27.02.2004)	2004-053391	JP	21 April 2005 (21.04.2005)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Abbou Farid
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PCT

NOTIFICATION CONCERNING
THE FILING OF AMENDMENTS OF THE CLAIMS

(PCT Administrative Instructions, Section 417)

From the INTERNATIONAL BUREAU

To:

MATSUNAGA, Takayoshi
Takaai Bldg.
15-2, Nihonbashi 3-chome
Chuo-ku, Tokyo 1030027
JapanDate of mailing
(day/month/year)

09 August 2005 (09.08.2005)

Applicant's or agent's file reference

PC3947

IMPORTANT NOTIFICATION

International application No.

PCT/JP2005/003157

International filing date

(day/month/year) 25 February 2005 (25.02.2005)

Applicant

JAPAN SCIENCE AND TECHNOLOGY AGENCY et al

1. The applicant is hereby notified that amendments to the claims under Article 19 were received by the International Bureau on:

03 August 2005 (03.08.2005)

2. This date is within the time limit under Rule 46.1.

Consequently, the international publication of the international application will contain the amended claims according to Rule 48.2(f), (h) and (i).

3. The applicant is reminded that the international application (description, claims and drawings) may be amended during the international preliminary examination under Chapter II, according to Article 34, and in any case, before each of the designated Offices, according to Article 28 and Rule 52, or before each of the elected Offices, according to Article 41 and Rule 78.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 338.70.10

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Amended Claims

JP2005/003157

Amended Claims [Received by the International Office on August 3, 2005 (03.08.05): Claim 5 of the Application as originally filed is modified; other Claims are not modified (2 pages).

Statement

Description based on Article 19

WHAT IS CLAIMED IS:

1. A method of generating a supersonic jet expansion, wherein a mixture of a supercritical fluid and a non-volatile sample or a mixture of a supercritical fluid and a pyrolytic sample is jetted into a high vacuum chamber of 10^{-7} Torr or more to generate a supersonic jet expansion of sample molecules in the lowest energy level without intermolecular collisions or molecular aggregates containing the sample molecules.
2. A mass spectrometry method using a supercritical fluid jet method, wherein a mixture of a supercritical fluid and a non-volatile sample or a mixture of a supercritical fluid and a pyrolytic sample is put under high vacuum of 10^{-7} Torr or more

to generate a supersonic jet expansion of sample molecules in the lowest energy level without intermolecular collisions or molecular aggregates containing the sample molecules to obtain a molecular beam, ions of the sample molecules in the lowest energy level without intermolecular collisions or molecular aggregates containing the sample molecules are obtained from the molecular beam by performing a laser ionization method, and mass spectrometry is performed on the ions.

3. The mass spectrometry method using the supercritical fluid jet method according to Claim 2, wherein in a supercritical jet generating device, a pulse valve is used to perform supersonic jetting of a mixture of a supercritical fluid and a non-volatile sample or a mixture of a supercritical fluid and a pyrolytic sample to obtain the supersonic jet expansion, the supersonic jet expansion is introduced via a skimmer into a differential evacuation chamber under a high vacuum of 10^{-5} Torr or more, the supersonic jet expansion is further more passed, via a skimmer, through high vacuum of 10^{-7} Torr or more to obtain the molecular beam, the sample molecules obtained from the abovementioned molecular beam or the molecular aggregates containing the sample molecules are ionized from the molecular beam by a resonance-enhanced multiphoton ionization method

using a tunable laser, and mass spectrometry is performed on the ions.

4. The mass spectrometry method using the supercritical fluid jet method according to Claim 3, wherein 25 volume % or less of at least one modifier selected from the group of modifiers consisting of water, methanol, ethanol, dioxane, acetonitrile, tetrahydrofuran, diisopropyl ether, and diethyl ether is added to the mixture of the supercritical fluid and the sample.

5. (Amended) A mass spectrometry device using a supercritical fluid jet method comprising: a supercritical fluid jet generating device that performs supersonic jetting of a mixture of a supercritical fluid and a non-volatile sample or a mixture of a supercritical fluid and a pyrolytic sample; a laser ionization chamber that obtains and ionizes a molecular beam from a supersonic jet expansion jetted from the jet generating device; and a mass analyzer, performing mass spectrometry of ions obtained from the laser ionization chamber and set under a pressure of 10^{-7} Torr or more.

6. The mass spectrometry device using the supercritical fluid jet method according to Claim 5, wherein a pulse valve that

generates the supersonic jet expansion is disposed in the supercritical fluid jet generating device, a differential evacuation chamber is disposed between the jet generating device and the laser ionization chamber, and skimmers are disposed at respective portions through which the supersonic jet expansion passes between the jet generating device and the differential evacuation chamber and between the differential evacuation chamber and the laser ionization chamber.

Description Based on Stipulations of Article 19 (1)

1. In view of the descriptive contents in the documents referenced in the search report, an amendment clarifying the degree of vacuum in the mass analyzer in Claim 5 was made to provide the invention with novelty and inventiveness.